DOCUMENT RESUME

ED 098 056 SE 018 171

AUTHOR Brown, Lewis M.
TITLE Relationships Between Progressivism, Traditionalism, Dogmatism, and Philosophical Consistency in Science, English and Elementary School Teachers.
PUB DATE 17 Apr 74
NOTE 15p.; Paper presented at the annual meeting of the National Association for Research in Science Teaching (47th, Chicago, Illinois, April 1974); Marginal legibility on Table 4 and Figure 1

EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS *Educational Philosophy; *Educational Research; Elementary School Teachers; Philosophy; *Predictor Variables; Science Education; Student Teachers; *Teacher Attitudes; *Teacher Characteristics
IDENTIFIERS Research Reports

ABSTRACT

This study was concerned with the delineation of relationships among teacher attitudes on progressive and traditional teaching ideologies, personal philosophical orientation, and the degree of individual differences in openness or closedness of belief systems among secondary and elementary teachers. Sixteen science student teachers and 54 science, English and elementary school teachers were participants in the study. Three tests, the Kerlinger Education Scale I, the Rokeach Dogmatism Scale, and the Hug Philosophical Consistency Test, were taken by all participants. Multi-linear stepwise regression and analysis of variance were used to determine predictive value of life philosophy upon educational attitude and to determine differences. Significant differences between pairs of groups were determined with t-tests. Conclusions from the study indicate life philosophy is related to educational attitude. Knowing the life philosophy would help in the formation of teaching teams and in assignment of student teachers to co-operating teachers. English teachers scored significantly different on the philosophical test; the results indicated they had greater experience with philosophy during college years than did science teachers. (Author/EB)

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Relationships Between Progressivism, Traditionalism, Dogmatism, and Philosophical Consistency in Science, English and Elementary School Teachers

by

Lewis M. Brown, Ph.D.
Assistant Professor of Student Teaching
New Mexico State University
San Juan Branch
Farmington, New Mexico

National Association for Research
in Science Teaching
Annual Convention
Chicago, Illinois
April 17, 1974

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RELATIONSHIPS BETWEEN PROGRESSIVISM, TRADITIONALISM, DOGATISM, AND PHILOSOPHICAL CONSISTENCY IN SCIENCE, ENGLISH AND ELEMENTARY SCHOOL TEACHERS

Statement of the Problem

This study was concerned with the delineation of relationships among teacher attitudes on progressive and traditional teaching ideologies, personal philosophical orientation, and degree of individual differences in openness or closedness of belief systems. More specifically, a relationship was sought between a particular teaching ideology, progressivism, and a particular personal philosophical orientation, existentialism, with the expectation that one may be indicative or perhaps predictive of the other.

Additionally, an attempt was made to isolate differences in progressive and traditional teaching ideologies, personal philosophica orientation, degree of differences in openness or closedness of belief systems, and degree of difference in pseudoprogressivism, among four subgroups consisting of secondary English teachers, secondary science teachers, secondary science student teachers, and elementary teachers.

Population

The population used in this study consisted of sixteen science student teachers enrolled at the university of New Mexico during the spring semester of 1973 and fifty-four teachers employed by the Albuquerque Public Schools. The sample of teachers was composed of thirty science teachers, ten English teachers, and fourteen elementary school teachers.

The sample of science teachers was crawn from seven high schools

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and one junior high school.

The science and English departments of two high schools were asked to volunteer for participation in the study because of their positions as student teaching centers used by the university of New Mexico Department of Secondary Education. The remainder of the science sample was derived from questionnaires mailed to all teache of secondary science affiliated with the Albuquerque Public Schools

The sample of student teachers was derived from the Spring, 1973 section in science student teaching offered at the University of New Mexico. All participants in the class volunteered for the study. The elementary sample was randomly chosen from the faculty of an elementary school which has both open space and self-containe classrooms. Grade levels one through five are represented.

Procedure

Three tests, the Kerlinger Education Scale I, the Rokeach Dogmatism Scale, and the Hug Philosophical Consistency Test, were distributed to the participants of the study with the understanding that they were to be completed at the individual's leisure, without a specified time limit, and then returned to the investigator. The participants were informed only of an indirect goal of the study, the potential use of the measured variables to create more meaningf student teacher - co-operating teacher matches, and were not expose to the major hypothese of the study or the variables to be measured and compared. It was clearly stated that comments would be welcome in margins and that there was no inherent rightness or wrongness of answers to the questions put forth in the instruments. The names of the instruments, two of which have been used extensively for man years in educational research, were withheld from the participants.

Instruments

The three instruments used for data collection are paper and

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pencil self-reporting measures.

Rokeach Dogmatism Scale measures openness or closedness of belief systems. The instrument makes the assumption that strong agreement with particular statements indicates possession of one extreme of the characteristic being measured. Each statement is designed to transcend specific ideological positions in order to penetrate to the formal and structural characteristics of all positions. A range of scores from 40 to 280 is possible with the lower scores indicating openmindedness and the higher scores indicating closemindedness.

Kerlinger Education Scale I measures attitudes reflecting traditionalism and progressivism.

The twenty item scale encompasses ten highly saturated progressive statements and ten highly saturated traditional statements. There is a high of seventy and a low of ten for each attitude. Forty is considered the neutral point.

Hug Philosophical Consistency Test

The Hug test of philosophical consistency expresses in statement form answers philosophers give to frequently asked questions. The procedure used in constructing the test was essentially deductive and the items of the instrument were drawn from the literature of philosophy. By choosing the response liked best and that liked least, the subject places himself in agreement with some philosophi represented in the test include idealism, realism, neo-Thomism, experimentalism, and existentialism.

Data Collection

All subjects included in the study completed the three instruments without interference from other subjects and in complet anonymity from other teachers.

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Data Analysis

Multi-linear stepwise regression and analysis of variance was used to determine predictive value of life philosophy upon educational attitude and to determine differences among the four teacher subgroups on Kerlinger Scale and Hug Test scores.

Significant differences between any pairs of groups on the Kerlinger and Rokeach instruments, including analysis involving pseudoprogressivism, were determined through the use of t - stati

Total Sample Results

1. A significant correlation was found between positive responses agreement to existentialism and progressivism. (Table In addition, a significant multiple correlation was discovered between positive responses to the philosophies as represented on the Hug test and progressivism.

2. A significant positive correlation between responses to negative existentialism, disagreement with existential thought, and traditionalism was found along with a significant negative correlation between negative realism and traditionalism (r = 0.25? df = 67, p 0.05, Table 2). Additionally, the multiple correlation between the five philosophies and traditionalism was significant (r = 0.3868, df = 67, p 0.05, Table 3).

3. In addition, we see a significant correlation between negative results in agreement with Existentialism and traditionali (Table 3).

4. It has been shown (Table 1) that teachers harboring progressive educational attitudes are in agreement with existentia philosophical ideologies and teachers harboring traditional educational attitudes are in disagreement with existentialism (Table 2). It has also been shown, through the significance

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of the multiple correlation and the F score, that the Hug test, and in particular the positive and negative existentialism scores on the instrument, is predictive of progressive and traditional educational attitude.

Teacher Group Comparison Results

Results also indicate that there are significant differences in educational attitude, philosophical orientation, and degree of openness or closedness of belief systems, among the four teacher subgroups. Science teachers and student teachers were: (1) signific more experimentalist than were English and elementary teachers. The science teachers and student teachers exhibited a much greater degree of pseudoprogressivism that did the other teacher subgroups.

Pseudoprogressivism is defined as attitudes which are progressiv in content but dogmatic or closed in structure and is measured by the relationship of scores on the progressivism portion of the Kerlinger Education Scale I and the Rokeach Dogmatism Scale.

Operationally, a pseudoprogressive is defined as an individual who scores above the median of forty on the progressivism portion of the Kerlinger Education Scale I, and is therefore considered progressive, and above the mean for his group on the Rokeach Dogmatism Scale, and is therefore considered dogmatic.

In using percentages to compare the degree of pseudoprogressivism in each subgroup, it was found that 53% of the science teachers, 40% of the English teachers, 63% of the science student teachers, and 36% of the elementary teachers were pseudoprogressives (Figure 1). The elementary sample was found to be significantly less traditional than the secondary science sample and the combined secondary science and English sample.

Using T - statistics to compare means for significant differenc

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the following was found:

Traditionalism

Science progressives were significantly more traditional than English progressives (t = 2.1408, df = 17, p 0.05) and elementary progressives (t = 3.2875, df = 20, p, 0.01).

Progressivism

Science pseudoprogressives were significantly less progressive than elementary pseudoprogressives (t = 3.3254, df = 19, p 0.01 Table

Conclusions

The following conclusions are based upon the findings of this study:

(1) Life philosophy is related to, and can be used as a predictor of, educational attitude.

(2) Knowing the life philosophy, and inferring from that the education attitude inclination, of co-operating teachers would help in both the formation of teaching teams and in the assignment of student teachers to co-operating teachers or to co-operating teacher teams.

(3) Enclish teachers scored significantly different results on the Hug Philosophical Consistency Test when compared to science teachers and science student teachers. It is postualted that English teachers have greater experience, during their college years, with philosophy than do science teachers. If science student teachers had more experience with philosophy, the discrepancy between English and science teachers might be lessened.

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Implications

(A) One possible implication:

1) Pretest entering students into College of Education.

2) Route those high in existentialism (agreement) into different experiences than those scoring low (disagreement) in existentialism.

3) Emphasize existential experience with those students scoring low in existentialism.

(B) Another possible implication:
Match student teachers and co-op teachers with:
1) Similar philosophies
2) Dissimilar philosophies

Use a scale of co-operating teachers perception of success of the student teacher to see if there is significant difference between matches of similar philosophies vs. matching of dissimilar philosophies.

(C) Methods of introduction of experiential existentialism:

1) Theater of absurd
2) Philosophic symposium based on dialogue
3) Seminar experience
4) Sensitivity training
5) fostering of existential tension in classroom
6) fostering attitude of insecure openness
7) fostering student self-guidance and self-evaluation
8) Self-understand modules.

PHILOSOPHY RESPONSES POSITIVE - AGREEMENT	MEAN	STANDARD DEVIATION	CORRELATION X vs. Y	REGRESSION COEFFICIENT
Idealism	1.25714	1.01704	0.02406	3.41449
Realism	0.38571	0.82168	0.01109	3.16991
Neo-Thomism	1.84286	1.09856	-0.12723	2.39419
Experimentalism	3.17143	1.77724	-0.10201	2.83430
Existentialism	3.18571	1.59975	0.30575*	4.11649
EDUCATIONAL ATTITUDE				
Progressivism	54.05713	7.08925		

INTERCEPT	22.02707
MULTIPLE CORRELATION	0.42448*
STD. ERROR OF ESTIMATE	6.66489

ANALYSIS OF VARIANCE FOR THE REGRESSION

SOURCE OF VARIATION	DEGREES OF FREEDOM	SUM OF SQUARES	MEAN SQUARES	F VALUE
Attributable to Regression	5	624.84351	124.96869	2.81330*
Deviation from Regression	64	2842.92773	44.42075	
Total	69	3467.77124		

*Significant at the .05 level

Table 1.
Multi-linear Stepwise Regression, Positive Philosophical Responses and Progressivism.

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PHILOSOPHY RESPONSES NEGATIVE - DISAGREEMENT	MEAN	STANDARD DEVIATION	CORRELATION X vs. Y	REGRESSION COEFFICIENT
Idealism	3.08571	1.34856	-0.21901	-0.79483
Realism	2.45714	1.32627	-0.25290*	-0.89363
Neo-Thomism	1.25714	1.03119	0.02360	-0.26191
Experimentalism	0.74286	0.82858	0.02360	-0.26191
Existentialism	2.08571	1.51076	0.33711*	2.10815
EDUCATIONAL ATTITUDE				
Traditionalism	36.35713	9.87021		

INTERCEPT	35.65329
MULTIPLE CORRELATION	0.42453*
STD. ERROR OF ESTIMATE	9.27913

ANALYSIS OF VARIANCE FOR THE REGRESSION

SOURCE OF VARIATION	DEGREES OF FREEDOM	SUM OF SQUARES	MEAN SQUARES	F VALUE
Attributable to Regression	5	1211.50806	242.30161	2.81412
Deviation from Regression	64	5510.53906	86.10217	
Total	69	6722.04688		

* Significant at the .05 level

Table 2.
Multi-linear Stepwise Regression, Negative Philosophy Responses and Traditionalism.

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PHILOSOPHY RESPONSES POSITIVE - AGREEMENT	MEAN	STANDARD DEVIATION	CORRELATION X vs. Y	REGRESSION COEFFICIENT
Idealism	1.25714	1.01704	-0.13055	-2.98566
Realism	0.38571	0.82168	0.21329	0.29107
Neo-Thomism	1.84286	1.09856	-0.03084	-1.64929
Experimentalism	3.1714	1.77724	0.20879	-1.27711
Existentialism	3.18571	1.59975	-0.28788*	-3.14337
EDUCATIONAL ATTITUDE				
Traditionalism	36.35713	9.87021		

INTERCEPT	57.10179
MULTIPLE CORRELATION	0.38684*
STD. ERROR OF ESTIMATE	9.45063

ANALYSIS OF VARIANCE FOR THE REGRESSION

SOURCE OF VARIATION	EGREES OF FREEDOM	SUM OF SQUARES	MEAN SQUARES	F VALUE
Attributable to Regression	5	1005.92944	201.18588	2.25256
Deviation from Regression	64	5716.12109	89.31439	
Total	69	6722.04688		

* Significant at the .05 level

Table 3.
Multi-linear Stepwise Regression, Positive Philosophy Responses and Traditionalism.

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TEST		STUDENT TEACHERS	SCIENCE TEACHERS	ENGLISH TEACHERS	SCIENCE AND ENGLISH	ELEMENTARY TEACHERS
Kerlinger						
Progressive	n =	16	30	10	40	14
	Σx =	867	1554	556	2110	822
	Σx^2 =	47307	82122	31468	113590	48638
	SD =	4.67	7.4651	7.8485	7.6585	5.3698
	$\bar{x}$ =	54.1875	51.8000	55.6000	52.7500	58.7143
Traditional	n =	16	30	10	40	14
	Σx =	574	1233	361	1594	824
	Σx^2 =	21228	52455	13797	66252	33916
	SD =	6.51	7.8316	9.2189	8.3682	9.0929
	$\bar{x}$ =	35.8750	41.1000	36.1000	39.8500	30.2857
Rokeach	n =	16	30	11	41	14
	Σx =	1969	3702	1257	4959	1813
	Σx^2 =	246913	465264	147289	612553	239863
	SD =	17.5174	17.0569	19.1002	17.8577	19.7669
	$\bar{x}$ =	123.0625	123.4000	114.2727	120.9512	129.50

Table 4

Comparison of Secondary and Student Teacher Results to Elementary Results on the Kerlinger and Rokeach Tests.

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SUBGROUPS	NUMBER
Science Student Teachers	16
Science Teachers	30
English Teachers	10
Elementary School Teachers	14
Total	70

Sample Make-up.

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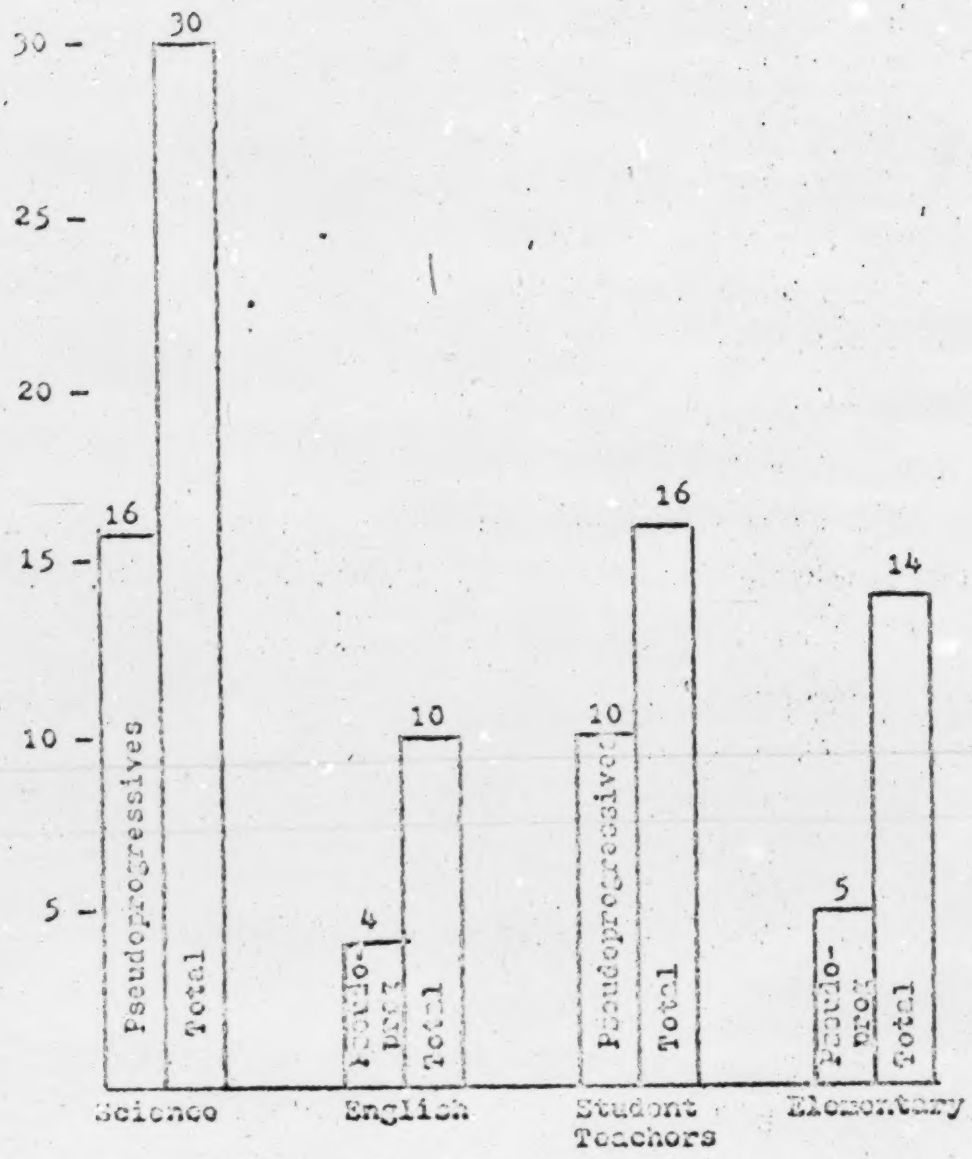

Figure 1

Number of Pseudoprogressives in Each Teacher Subgroup as Compared to the Total Responses for Each Subgroup.

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